# Bilobed pharyngeal pouch: a very rare finding

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#### Abstract

A bilobed pharyngeal pouch is a very rare finding. One such case is reported here, and is the first to be treated successfully by endoscopic division and stapling.

Key words: Pharynx; Diverticulum

## Introduction

A bilobed and double pharyngeal pouch is a very rare finding, and has been mentioned only five times previously in the literature.<sup>1-5</sup> The case reported by Stafford and Frootko<sup>4</sup> was an X-ray study and no further treatment was



considered necessary; the other reported cases were treated by an external surgical approach. One such rare finding is reported here and is the first to be treated by endoscopic division and stapling.



FIG. 1. (a) and (b) Contrast study shows bilobed pharyngeal pouch with larger pulsion diverticulum to the right.

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(a)

#### FIG. 2 (a) and (b)

Post-operative barium swallow showing fluid level in the pouch remnants.

## **Case report**

A 59-year-old male patient had symptoms of dysphagia and regurgitation of food one to two hours after eating for more than one year and was prone to chest infections. On clinical examination, he had a gurgling sound on the right side of his neck, fibre-optic examination of the laryngopharyngeal region was unremarkable. A contrast study with barium showed a bilobed pharyngeal pouch with a larger pulsion diverticulum on the right than on the left (Figure 1(a) and (b)). On endoscopic examination under general anaesthesia the pouch seem to have a larger pulsion diverticulum to the right than to left. The central part of the party wall was identified, this was divided in the midline initially and then down towards the right using a stapling device that can be angled. In total five cartridges were used in order to achieve as much division of the party wall as possible, no nasogastric tube was passed. Postoperative contrast studies the next day (Figure 2(a) and (b)) showed a shallow fluid level in the upper mediastinum



# (b)

but no evidence of leakage. The patient was discharged home on the second post-operative day. Reviewed four weeks later, the patient was symptom-free. Because of the complex nature and the size of the pouch, further review was arranged.

## Discussion

A single pharyngeal pouch is an uncommon finding, the incidence is 1:200 000 population. The treatment of symptomatic pouch may be either by endoscopic division of the party wall using diathermy coagulation or by laser as in Dohlman's procedure, or by an external surgical approach, a combination of cricopharyngeus myotomy with inversion, suspension, or excision. Since the introduc-

tion of endoscopic stapling by Martin-Hirsch and Newbegin<sup>6</sup> and by Collard<sup>7</sup> almost one third of all pharyngeal pouches are treated in this manner. A bilobed pharyngeal pouch is a rare finding, Harrington<sup>1</sup> found one case of double diverticula in his report on the surgical treatment of 140 cases. Shallow and Clerf<sup>2</sup> reported out of a series of 186 cases treated surgically, in two cases the fundus of the sac was bilocular, Jesberg<sup>3</sup> reported a bilobed pouch, Meehan and Henein<sup>5</sup> a double pouch treated by external excision. Stafford and Frootko<sup>4</sup> reported a case with two distinct pouches with minimum symptoms and no further treatment being considered necessary. This patient had symptoms of dysphagia, regurgitation and was prone to chest infection and was treated by endoscopic division and stapling with complete allevation of his symptoms.

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#### References

1 Harrington SW. Pulsion diverticulum of the hypopharynx at the pharyngo-esophageal junction. *Surgery* 1945;**18**:66–81

- 2 Shallow TA, Clerf LH. One stage pharyngeal diverticlectomy. J Surg Gynecol Obstet 1948;86:317–22
- 3 Jesberg N. Bilobed pulsion diverticulum of the hypopharynx: a historical summary and case report. *Ann Otol Rhinol Laryngol* 1954;**63**:39–50
- 4 Stafford N, Frootko N. Double pharyngeal pouch. Ann Otol Rhinol Laryngol 1987;97:127
- 5 Meehan T, Henein RR. An unusual pharyngeal pouch. J Laryngol Otol 1992;**106**:1002-3
- 6 Martin-Hirsch DP, Newbegin CJR. Autosuture GIA gun: a new application in the treatment of hypopharyngeal diverticula. *J Laryngol Otol* 1993;**107**:723–5
- 7 Collard LM, Otte JB, Kestens PJ. Endoscopic stapling technique of esophagodiverticulostomy for Zenker's diverticula. Ann Thorac Surg 1993;56:573-6

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